

PALER EGG.—Ground-colour creamy, streaked all over with long narrow streaks of chestnut-brown interspersed with similar underlying streaks of mauve. The pale ground-colour is a clear cream, *not* saturated with pale cinnamon as in the pale eggs of *P. augustæ-victoriæ*. Length 36·5 mm. ; breadth 26 mm.

DARKER EGG.—Ground-colour clear rosy cinnamon, streaked rather more closely with rufous streaks and underlying mauve streaks. The streaks also stop short towards the smaller pole. Length 36·5 mm. ; breadth 25·5 mm.

Sattelberg, German New Guinea (Keysser coll.).

In an article on New Guinea Birds ('Notes from the Leyden Museum,' xxx. pp. 225-244), Dr. Van Oort enumerates three specimens of *Pteridophora alberti* Meyer, two from the 'Tabi or Gautier Mts., east of the Ambernoh River (Mambarano), and one from Kwatisori, South Coast of Geelvink Bay. These probably all came from the interior, and were bought by their respective donors from the native traders at the localities cited. If, however, they really were shot by or handled in the flesh by their donors, it would go to prove that *P. alberti* has a similarly wide range to *Loria loria* and *Paryphephorus duivenbodei*—a fact I strongly doubt, as in such case we should have received examples many years before they actually did arrive.

V.—*On the Eggs of certain Birds-of-Paradise.*

By W. R. OGILVIE-GRANT, M.B.O.U.

(Plate III.)

IN the seventeenth volume of the 'Novitates Zoologicae,' issued in 1910, Dr. Hartert has published an account of the fine collection of eggs of Birds-of-Paradise and Bower-Birds in the Tring Museum. The value of the paper is greatly enhanced by a beautiful coloured plate shewing the eggs of no less than twenty-one different species; several are figured

for the first time. It must, however, be pointed out that, in a good many instances, the identification of the eggs is somewhat doubtful, and rests on the evidence of the natives who obtained them.

The Natural History Museum having recently received eggs of several species of Birds-of-Paradise the identification of which is certain, it has been thought that a few notes and figures of these beautiful objects might be of interest to the readers of 'The Ibis.'

PARADISEA APODA. (Plate III. fig. 2.)

Paradisea apoda Meyer, Zeitschr. Ges. Orn. i. p. 293, pl. xvii. fig. 2 (1884); Goodfellow, Avicult. Mag. (3) i. p. 283 (1910).

1. Silbattabatta, Wanumbai, I. of Wokan, Aru Islands, 12th December, 1903 (*H. Goodfellow*). Presented by Mrs. E. J. Johnstone.

The beautiful egg figured in the accompanying plate was procured by Mr. Walter Goodfellow, who has published the following account of it:—

“The nesting-season appears to commence in December, just as the males have gone out of plumage, for I had an egg brought to me early in that month, during my last visit to the Aru Islands, and a few days later the same native took another to Mr. Pratt, Sir William Ingram’s collector, who was staying in that district. The man said he got them both from the same nest, but there was a remarkable difference in the colouring of the two. While Mr. Pratt’s egg was almost white with comparatively few markings, mine was very pink and richly streaked all over, but more especially at the larger end. At the same time, together or apart there could be no question as to their being the eggs of a Paradise-Bird. The native who brought them being a particularly stupid person and not speaking much Malay, I could get no satisfactory information from him about the nest, whether it was high up or low down. In all probability it was low down, like that of *P. raggiana*, and two eggs is the usual number, with a possible three at times. During the first week in January

Mr. Pratt had a young example of *P. apoda* brought to him alive, which a native had caught in the jungle."

The egg figured measures 1.54×1.08 inches. That described and figured by Meyer is very much smaller, about 1.36×1.0 inches, and may not be the egg of *P. apoda*. It agrees closely in size and colour with an egg of *P. raggiana* presented to the Natural History Museum by Captain Barton. Though obtained by Ribbe at Siltute, Aru Islands, it may have been brought there by natives from New Guinea for purposes of trade.

PARADISEA RAGGIANA. (Plate III. fig. 1.)

Paradisea raggiana Ramsay, Pr. Linn. Soc. N.S.W. viii. p. 26 (1883); Hartert, Nov. Zool. xvii. p. 489, pl. x. fig. 3 (1910).

1. Kokada, N. side of Owen Stanley Range. Presented by Captain F. R. Barton.

1. Wamai, S. side of Owen Stanley Range. Presented by Captain F. R. Barton.

There is no reason to doubt that these eggs of *P. raggiana* have been correctly identified, Captain Barton having obtained them from a reliable native collector, and having assured himself on this point. The eggs are very similar to one another and resemble the figure given by Dr. Hartert, who describes an egg procured by A. S. Anthony in the Owen Stanley Mountains at an elevation of 2000 ft.

The egg figured is that procured at Kokada and measures $1.4 \times .92$ inch; that from Wamai is rather larger and measures 1.42×1.02 .

The nest and egg of this species were first recorded by Dr. E. P. Ramsay in his paper quoted above. He gives the measurements of the egg as $1.45 \times .95$, but no indication is added either of the locality where it was obtained or of the name of the collector.

ASTRAPIA STEPHANIE. (Plate III. fig. 3.)

Astrapia stephanie Hartert, Nov. Zool. xvii. p. 488, pl. x. fig. 8 (1910).

1 (laid in captivity). Bagutana, Owen Stanley Mts., 8000-



9000 ft., 12th August, 1911 (*Wall:er Goodfellow*). Presented by Mr. E. J. Brook.

On comparing my figure with that given by Dr. Hartert it will at once be seen that the latter represents a very much smaller egg, measuring $1.41 \times .99$ inch ($36\frac{1}{2} \times 25.4$ mm.). The egg in the Tring Museum, taken by A. S. Anthony in the Owen Stanley Mountains, has very possibly been incorrectly identified, and seems more likely to be that of *Paradisea raggiana*, which it resembles in size, colour, and markings. However, all the Paradise-Birds seem to lay eggs of much the same type, and bearing in mind the great individual variation in size to be found in the eggs of the Common Rook (*Corvus frugilegus*), it is not wise to express one's doubts in too positive a manner.

In Mr. E. J. Brook's splendid aviaries at Hoddam Castle there are no fewer than three pairs of these fine birds living, all brought back by Mr. W. Goodfellow in 1909. In 1911 one pair of them nested, and three clutches containing one egg each were laid. The first egg, figured in the accompanying Plate, was known to be "clear," and was taken after the female had incubated it for about a week; the second egg was unfortunately broken by the male; subsequently, as mentioned below, a third egg was laid.

Mr. Brook has kindly furnished me with the following notes concerning this most interesting event.

"When I went to Norway at the end of May one pair of the Princess Stephanie's Paradise-Birds were not agreeing together very well; the hen was very masterful and would not allow the cock to feed. In July my man separated the pair and very soon afterwards the hen commenced to build a nest. It was a large rough structure placed on a kind of bracket, where a forked branch was fixed to the wall of the inner aviary.

"The foundation of the nest was formed of a few birch-twigs and the rest was built of bamboo-twigs with the leaves on. It was rather roughly constructed, but very substantial: it measured about 12 inches across, and about 8 inches in depth, and though a few pieces of moss had been carried in,

they could scarcely be called a lining. One large egg was laid on the 12th of August, 1911, quite a month after the commencement of building operations, and the hen sat very closely. As the pair had been separated for quite six weeks, and the male bird was in full moult at the time of separation, there was of course no hope of the egg being fertile.

“Subsequently, the male having completed his moult, the pair of *A. stephanie* nested again, and again one egg was laid. Unfortunately the male destroyed it by putting his bill through it.”

Later (November 15th, 1911), I have just heard from Mr. Brook that the bird is again sitting on one egg, but he is not sure whether it is fertile or not.

The strides that have been made in Aviculture during the last few years are truly astonishing. Ten years ago it was thought a wonderful feat to bring a living Paradise-Bird to this country, and still more so to keep it alive. A short time ago Mr. Brook had examples of no fewer than twenty-three species of Paradise-Birds and Bower-Birds living in his wonderfully arranged aviaries at Hoddam Castle. Now two of these species have built nests and laid eggs, and there is every reason to hope that during next season they may successfully rear their young.

The egg figured measures 2.7×1.1 inches.

LOPHORHINA MINOR. (Plate III. fig. 6.)

Lophorhina superba minor Hartert, Nov. Zool. xvii. p. 487, pl. x. figs. 22, 23 (1910).

1. Kagi, Owen Stanley Mountains, 6000 ft. Presented by Captain F. R. Barton.

This egg was procured by Captain Barton from the same source as those of *Paradisaea raggiana* mentioned above, and there is no reason to doubt its authenticity.

Eggs of this species have already been figured by Dr. Hartert, but represent paler and somewhat different types, with very few markings on the broad end. They agree, however, in size.

The egg figured measures $1.23 \times .84$ inches.

PTILORHIS INTERCEDENS. (Plate III. figs. 4, 5.)

Ptilorhis magnifica intercedens Hartert, Nov. Zool. xvii. p. 488, pl. x. fig. 9 (1910) ; Brook, Ibis, 1911, p. 577.

2. Moroka Mts., British New Guinea, 9th June, 1908. Presented by Mr. Walter Goodfellow.

The identification of these eggs is certain, for the female parent was caught on the nest by Mr. Goodfellow and is now living in the aviaries of Mr. E. J. Brook at Hoddam Castle. It twice attempted to breed there during the summer and autumn of 1911, but the two eggs were laid from the perch and broken. This was a great disappointment as the bird had constructed two fine nests before the second pair of eggs were laid—one in a large bunch of birch twigs in the inner aviary, and the other on a branch of a tree covered with honeysuckle in the flight-aviary.

As will be seen from the figures the specimens taken by Mr. Goodfellow resemble the egg figured by Dr. Hartert, which was taken in German New Guinea by Wahnes.

The two eggs figured measure respectively $1.4 \times .96$ and $1.37 \times .95$ inches.

PTILORHIS ALBERTI. (Plate III. figs. 7 & 8.)

Craspidophora alberti Le Souëf, Ibis, 1897, p. 394, text-fig. 1 ; North, Nest & Eggs Birds Austr. i. p. 29 (1901).

Ptilorhis alberti Campbell, Nests & Eggs Austr. Birds, i. p. 76, pl. 6 (1901).

Ptilorhis magnifica alberti Hartert, Nov. Zool. xvii. p. 488 (1910).

2. Somerset, Cape York, 23rd October, 1896 (*H. G. Barnard*). Received in exchange from Mr. D. Le Souëf.

The eggs here figured are those described by Mr. D. Le Souëf in 'The Ibis' for 1897. They were obtained at Somerset, Cape York, on the 23rd of October, 1896, by Mr. H. G. Barnard, who was the first to find the nest and eggs of this species. After waiting for three hours he shot the female when she returned to her eggs. Altogether Mr. Barnard obtained no less than fourteen eggs of this